

Context	
Unit	Rivers
Assessment	Why should we protect rivers from pollution?
Key Knowledge <i>How does this unit fit in?</i> <i>What Big Ideas are explored?</i>	<p>“Physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle” is a statutory, national curriculum requirement. In this unit, pupils will gain a broad understanding of the location of different major rivers, how they are formed and interact with the land around them, as well as the relationship between humans and rivers through a European case study. The substantive concepts (big ideas) covered in this unit are Settlements and Environment. In Year 3, ‘Villages, Town and Cities’ children analysed the desirable features of a settlement and will have an understanding that being near a river is advantageous for a settlement. In history, children will have learnt that the Shang Dynasty grew around the Yellow River. Most people living in the Shang Dynasty were farmers, and they grew wheat, millet and barley on the banks of the river. People were also at risk of flooding and their homes being destroyed as a result. In this unit, children will find out more about why rivers are so important to the towns and villages that have developed on their banks. By looking at the features of rivers, and the natural and human ways that rivers change over time, children will explore the life stories of rivers and the impact of pollution over time.</p> <p>In order to extend learning about the pollution of rivers, children could research the transportation of microplastics and the impact this might have on the environment. (This is not a detailed part of the sequence below but could be used as a homework project)</p> <p>As part of the 100 Club, Year 4 children need to learn the 10 longest rivers in the world. Poster can be found here to display in classrooms to support pupils’ learning. This 100 Club Knowledge focus will extend beyond this geography unit.</p>
Skills <i>What skills are taught in this unit?</i> Skills Progression	<p>Enquiry: Inspire in pupils a curiosity and fascination about the world and its people; how are the actions of humans impacting physical features in our world?</p> <p>Human & Physical: Analyse the impact that human and physical environments have on each other.</p> <p>Location & Place: locate the world’s countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities; name and locate key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time</p> <p>Mapwork: use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied</p>

Vocabulary <i>To be displayed on the working wall</i>	Channel Delta Deposition	Erosion Mouth pollution	Sediment Source transportation	Waste water
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Unit Overview

Enquiry Question / Pearson lesson	Learning Intention	Focus Skill	Diversity	Local Geography	Curriculum Links
1 Where are the major rivers of the world?	I can explore a range of rivers of the world.	Mapwork Location & Place		The River Thames	Maths - lengths and distance. Ordering and comparing.
2 What are erosion, transportation and deposition?	To explore the features of rivers along its course.	Physical Geography			
3 How do rivers shape the land around them?	To explore how rivers change shape of the land around them	Physical Geography			
4 Why is the Volga river important to people?	To explore the key uses of the river Volga.	Enquiry Human & Physical Location & Place	A European study (Russia)		
5 Why are rivers important to people?	To compare and contrast the Volga and Colne rivers.	Enquiry Human & Physical		The Colne River (West Drayton)	
6 Assessment: Why should we protect rivers from pollution?					

Lesson 1

Pearson Lesson	Where are the major rivers of the world?
Learning Intention	I can explore a range of rivers of the world.
SOLO SC: Uni- Structural <i>Bronze</i>	I can name the rivers of the world
SOLO SC: Multi- Structural <i>Silver</i>	I can locate rivers on a map/atlas.
SOLO SC: Relational <i>Gold</i>	I can compare the lengths of major rivers of the world
SOLO SC: Extended Abstract <i>Platinum</i>	I can explain the difference between the longest river and the biggest river by comparing discharge
<p style="text-align: center;">The lesson (How will children meet the LI?)</p>	<ul style="list-style-type: none"> - Introduce the knowledge organiser for this topic & stick in books. - Introduce the key concepts (Settlements and Environment) for this unit. How does this unit fit in with our geography journey so far? How do you think Rivers are connected with these concepts? What connections can the children make? How can children build upon their learning from Year 3? Encourage discussion. - Discuss the key vocabulary for the lesson, add the words and their definitions to the working wall as each one is discussed. <p>Teacher model the task:</p> <ul style="list-style-type: none"> - Explain that the children will research 10 major rivers of the world. They will use atlases to locate the rivers and chromebooks to conduct some research regarding length, countries on course, tributaries and discharge. - Teacher to model using the River Thames. Ask children if they have heard of this river before? What country can it be found? What do they already know about it. - Model to the children how to use the index of an atlas to find the River Thames. You may wish to show the atlas under the visualiser, or have children follow your model with an atlas in front of them. - Model to the children how to find necessary information using the atlas. Use your finger to trace the source and follow the river noting which countries it flows through. - When you have gathered as much information as you can from the atlas, use this website to find out any missing information. - Complete the information grid. <p>Children's Activity</p> <ul style="list-style-type: none"> - Provide children with their own copy of the information grid, initially a different river to each pair. (This means that if time runs short, information can be shared between pupils) - Children work in pairs to use an atlas and then this website to find out information about their river. - Repeat with the next river on the list. - <i>If time is running short, stop the class and share the information so everyone can complete their grids. (Teacher to model on an enlarged version which can be added to the working wall.)</i> - Children to put the rivers in order from longest to shortest. Teacher to preempt which children will struggle with the maths task and work with a small group on the carpet. <p>Plenary:</p> <ul style="list-style-type: none"> - Introduce the 100 Club Knowledge focus. The aim is for the children to know the 10 longest rivers by heart, by the end of Y4.

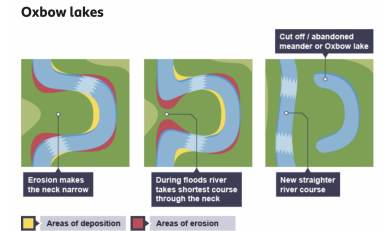
Key Vocabulary for the lesson	River Source	Tributaries Mouth	Discharge (the amount of water which flows out the mouth per second)
Resources	Rivers Lesson Plan	Pupil Booklet Pupil Booklet (ANSWERS)	Slides Information Grid (Activity)

Lesson 2

Pearson Lesson	What are erosion, transportation and deposition? How do rivers shape the land around them?			
Learning Intention	To explore the features of rivers along its course.			
SOLO SC: Uni- Structural <i>Bronze</i>	I know what a river is.			
SOLO SC: Multi- Structural <i>Silver</i>	I can describe the key features of a river system			
SOLO SC: Relational <i>Gold</i>	I can compare the features of a river at different points along its course			
SOLO SC: Extended Abstract <i>Platinum</i>	I can identify negative impacts of humans on rivers.			
The lesson (How will children meet the LI?)	<ul style="list-style-type: none"> - Retrieval Quiz (page 8 of Pupil Booklet) (Remove Question 2, this will be covered today!) *This is a vocabulary heavy session. Word mats may be useful for pupils to be able to engage fully with the new language. - Ask children to discuss in pairs the life story of a river – where might it be born? Where does its life end? What kinds of places and events might it see along its life’s journey? Encourage children to think back to their learning of the water cycle in Year 3. - Watch this video, what key vocabulary can the children identify? Share and add to working wall where appropriate. - Work through this powerpoint with the children, take time to discuss the key vocabulary and add to the working wall. - Children complete this lesson activity sorting characteristics of each part of the river. (3 red boxes = one in each column) - Share and discuss answers. - Plenary: children to explain to their partner the journey of water through the 3 parts of the river. - Stretch: children to write an explanation of the journey from source to mouth. 			
Key Vocabulary for the lesson	Upper Course Middle Course Lower Course	Valley Channel Waterfall	Rapids Meander Gorge	Altitude Erosion Flood plain
Resources	Rivers Lesson Plan	Pupil Booklet Pupil Booklet (ANSWERS)	Rivers Video Powerpoint Presentation	Lesson Activity

Lesson 3

Pearson Lesson	What are erosion, transportation and deposition? How do rivers shape the land around them?		
Learning Intention	To explore how rivers change shape of the land around them		
SOLO SC: Uni- Structural <i>Bronze</i>	I can identify key features of a river system		
SOLO SC: Multi- Structural <i>Silver</i>	I can identify erosion and deposition in the context of rivers.		
SOLO SC: Relational <i>Gold</i>	I can explain how rivers change shape of the land around them		
SOLO SC: Extended Abstract <i>Platinum</i>	I can evaluate how oxbow lakes are formed.		
<p>The lesson (How will children meet the LI?)</p>	<ul style="list-style-type: none"> - Retrieval Quiz (Questions need to be written) - This lesson carries on from last lesson - allow children opportunity to look over their learning from last lesson and have a class discussion recapping the main elements of the upper, middle and lower courses of a river. - Show children the different images of rivers. Ask them to work in pairs to answer the key questions: What stage of the river's journey is shown, and which features can you identify? (use images from last week's powerpoint) - Complete this demonstration with your pupils (video link for teacher reference, not to show the class) - Children tell their partner how erosion, transportation and deposition changes the shape of the land - Children to write an explanation of how erosion, transportation and deposition changes the shape of the land. - Stretch: Use this diagram to help explain how lots of erosion over time can cause rivers to change shape and create an Oxbow Lake. Can children add to their explanations from the lesson 		
Key Vocabulary for the lesson	Erosion Transportation Deposition	Meander Oxbow Lake Sediment	Upper Course Middle Course Lower Course
Resources	Rivers Lesson Plan	Pupil Booklet (Subject Knowledge) Pupil Booklet (ANSWERS)	Practical Demonstration (Tray, sand, water)



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Lesson 4	
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Pearson Lesson	Why is the Volga river important to people?						
Learning Intention	To explore the key uses of the river Volga.						
SOLO SC: Uni- Structural <i>Bronze</i>	I can locate the river Volga.						
SOLO SC: Multi- Structural <i>Silver</i>	I can describe the uses of the river Volga						
SOLO SC: Relational <i>Gold</i>	I can explain how local people use the river Volga and describe the environmental impact						
SOLO SC: Extended Abstract <i>Platinum</i>	I can evaluate ways humans are polluting rivers.						
The lesson (How will children meet the LI?)	<ul style="list-style-type: none"> - Retrieval Quiz (Questions need to be written) - Before properly beginning the lesson. Ask children to work in pairs to find the river Volga using the index of an atlas. What country is the river found in? Can children identify the source location? The location of the mouth? Share findings and add to the working wall (using document from lesson 1) - Ask children to identify what continent Russia is in. - Russia is transcontinental which means it covers both Europe and Asia. While much of its territory lies in Asia, most of its people reside in Europe. Looking at the map on page 13, identify which cities are closest to the Volga. - Why do nearly half of all Russian people live near the Volga? Why are major cities located so close to the river? (Similar to London and the River Thames) - Work through the Pupil Booklet (pages 13-15) - Plenary: Discuss how human behaviour can cause rivers to become polluted. Children to draw a mind map collecting their ideas. - Stretch: Opportunity to tackle platinum; this requires children to make connections between the learning from today and previous learning from year 3 to tie together new learning with concepts of settlement and environment. Further study of the Nile (Egypt) or the Ganges (India) would further support this. 						
Key Vocabulary for the lesson	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">Settlements</td> <td style="width: 50%; border: none;">Transcontinental</td> </tr> <tr> <td style="border: none;">Environment</td> <td style="border: none;">Pollution</td> </tr> <tr> <td style="border: none;">Impact</td> <td style="border: none;">Waste Water</td> </tr> </table>	Settlements	Transcontinental	Environment	Pollution	Impact	Waste Water
Settlements	Transcontinental						
Environment	Pollution						
Impact	Waste Water						

Resources	Rivers Lesson Plan	Pupil Booklet Pupil Booklet (ANSWERS)
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Lesson 5

Pearson Lesson	Why are rivers important to people?	
Learning Intention	To compare and contrast the Volga and Colne rivers.	
SOLO SC: Uni- Structural <i>Bronze</i>	I can locate the rivers using the index of an atlas	
SOLO SC: Multi- Structural <i>Silver</i>	I can list the ways people use the Volga river in Russia and the Colne river in West Drayton	
SOLO SC: Relational <i>Gold</i>	I can compare and contrast the Volga river in Russia and the Colne river in West Drayton	
SOLO SC: Extended Abstract <i>Platinum</i>	I can speculate how continued pollution of our rivers could change how they are used in the future	
The lesson (How will children meet the LI?)	<ul style="list-style-type: none"> - Retrieval Quiz (page 17 of Pupil Booklet) - Ask children if they know what the name of the river closest to WDA is? - Children will likely guess the River Thames. Explain that it is in fact the River Colne which is a tributary of the River Thames. Discuss the term tributary (this was already discussed in previous lessons) - Children to use the index of an atlas to find the River Colne. - Today, children will compare the River Volga (explored last lesson) and The River Colne. - Using an A3 version of this sheet, children will use their exercise books, atlases and chromebooks to research information about the 2 rivers. In the section titled: interesting facts, children should add information about the use of the river. - Plenary: children to write 3 key statements about the rivers summarising their findings. E.g. The Volga River is a much longer river than the River Colne. The Volga River is 3530 km long whereas the River Colne is only 58 km. 	
Key Vocabulary for the lesson	Tributary Source	Mouth Pollution
Resources	Rivers Lesson Plan	Pupil Booklet Pupil Booklet (ANSWERS)

[Comparing Rivers](#)

Lesson 6

Assessment Think! Question	Why should we protect rivers from pollution?
Tasks	Class discussion about Think! Question - encourage use of appropriate vocabulary (Collaborative) Think! Question (Independent) Knowledge Quiz (Independent)
Key Vocabulary for the lesson	
Resources	Rivers Think! Question Knowledge Quiz Knowledge Quiz ANSWERS